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ABSTRACT

Science educators from Plymouth State College and elementary teachers from New Hampshire's Supervisory Union 48 organized as a cooperative committee to develop a program: 1) to stimulate and assist New Hampshire school districts in modernizing their elementary school science programs by providing a model program for their observation, modification, and eventual adoption; and 2) to update the preparation of elementary science teachers so that they might better teach their pupils and serve as supervising teachers for student teaching programs. Plymouth State College agreed to conduct a 30-week institute to train these teachers in teaching elementary science, specifically in the use of ESS materials. The school boards within the Union agreed to send their teachers to the institute and to implement the program in 1972. The program was financed by a special program grant for a local charitable organization, the Spaulding-Potter Trust. The institute is being evaluated through pre and post measures of the participants' understandings of and attitudes towards science. Written critiques and open feedback on the methods and materials presented in the institute are evaluated as they are used by the participants in their elementary classrooms. (Author/MBM)

ED056990

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Abstract

A Cooperative College-School Elementary Science Program

Submitted to the Program for Distinguished Achievement Awards
of the American Association of Colleges for Teacher Education
by the Cooperative Elementary Science Study Committee
of Plymouth State College and New Hampshire Supervisory Union 48

Dr. Mark T. Sylvestre, Department of Natural Sciences,
Plymouth State College, Chairman of the Committee

SP 005389

Science educators from Plymouth State College and elementary teachers from New Hampshire's Supervisory Union 48 organized as a Cooperative Committee to develop a program to: (1) stimulate and assist New Hampshire school districts in modernizing their elementary school science programs by providing a model program for their observation, modification, and eventual adoption; and (2) update the preparation of the elementary science teachers in New Hampshire, so they might better teach their pupils and better serve as supervising teachers for student teaching programs in the colleges of New Hampshire.

Plymouth State College agreed to conduct a thirty-week institute to train these teachers in teaching elementary science, specifically in the use of ESS materials. The school boards within the Union agreed to send their elementary teachers to the institute and to implement the program in 1972. The program was financed by a special project grant from a local charitable organization, the Spaulding-Potter Trust.

The Institute is being evaluated through pre and post measures of the participants' understandings of and attitudes toward science. Written critiques and open feedback on the methods and materials presented in the Institute are evaluated as they are used by the participants in their elementary classrooms.

A COOPERATIVE COLLEGE-SCHOOL ELEMENTARY SCIENCE PROGRAM

Submitted to the Program for Distinguished Achievement Awards
of the American Association of Colleges for Teacher Education
by the Cooperative Elementary Science Study Committee
of Plymouth State College and New Hampshire Supervisory Union 48:

Dr. Mark T. Sylvestre, Department of Natural Sciences, Plymouth State College, Chairman of the Committee

Dr. Mary G. Bilheimer, Department of Natural Sciences, Plymouth State College

Dr. Robert L. Jones, Department of Natural Sciences, Plymouth State College

Professor Alan H. Davis, Department of Natural Sciences, Plymouth State College

N. Kenneth Smith, Assistant Superintendent of Schools, New Hampshire Supervisory Union 48

Marion S. Fysh, Plymouth Elementary School, Plymouth, New Hampshire

Nance Sanborn, Thornton Elementary School, Thornton, New Hampshire

Phyllis Morse, Campton Elementary School, Campton, New Hampshire

Linda Morse, Holderness Central School, Holderness, New Hampshire

Harriet Pray, Plymouth Elementary School, Plymouth, New Hampshire

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SUMMARY

This program was developed to (1) stimulate and assist New Hampshire school districts in modernizing their elementary school science programs by providing a model program for their observation, modification, and eventual adoption, and (2) update the preparation of the elementary science teachers in New Hampshire, so they might better teach their pupils and better serve as supervising teachers for student teaching programs in the colleges of New Hampshire.

A group of elementary teachers and administrators from New Hampshire's Supervisory Union 48 and personnel from the Natural Sciences Department, Plymouth State College, organized as a Cooperative Elementary Science Committee to select a tentative elementary science curriculum for Supervisory Union 48 and to plan an institute to train the elementary teachers within the Union in teaching science. The Elementary Science Study (ESS) program was selected as the one to be recommended for adoption by the Union.

Plymouth State College agreed to conduct a thirty-week institute (one three-hour session each week) to train these teachers in teaching elementary science, specifically in the use of ESS materials, if funds could be procured to finance the program.

Each of the seven school boards within the Union agreed to send their elementary teachers to the institute and to provide the necessary materials for implementing the program during the following year.

The institute was financed by a special project grant from a local organization, the Spaulding-Potter Trust. As a result, 46 elementary teachers in New Hampshire's Supervisory Union 48 are attending this thirty-week institute during the 1971-72 academic year.

The College and Union are currently making plans for extended consultant and supervisory services to the teachers during the implementation of the program during the 1972-73 academic year.

I. Description and Development of the Program

During the past decade there appeared to be a state-wide need for updating the training of both beginning and experienced teachers to teach modern programs in elementary science.

These needs were particularly obvious in the geographical area encompassing Plymouth State College, the primary teacher training institution serving Central and Northern New Hampshire. Supervisory Union 48 which includes the town of Plymouth and surrounding rural schools appeared to be an ideal location for initiating an updated elementary science program because:

1. State standardized testing norms indicated that the elementary schools in the Union were generally below the state norms;
2. The teachers felt inadequately prepared to teach in a modern science program;
3. The area is centrally located and the resources of Plymouth State College are within a 25 mile radius of each school in the Union.
4. Teacher training programs in New Hampshire colleges needed an expanding number of supervising teachers who were prepared to teach in modern elementary science curricula.

In preparing for this project, elementary teachers from each of the seven school districts in the Union (Campton, Holderness, Thornton, Plymouth, Rumney, Waterville Valley, and Wentworth) and professors from the Department of Natural Science, Plymouth State College organized as a Cooperative Elementary Science Committee in August, 1970. The two functions of the Committee were to:

A. Plan an institute to upgrade and modernize the training of the fifty elementary teachers within the Union in teaching science, and;

B. Select and recommend a modern elementary science curriculum for possible adoption by the Union.

The Committee attended workshops with consultants who represented three different programs which were originally developed by scientists and science educators under the auspices of the National Science Foundation. These included: The Science Improvement Curriculum Study (SCIS) of Rand McNally; the American Association for the Advancement of Science (AAAS) of Xerox and the Elementary Science Study (ESS) of McGraw-Hill.

After long examination, the Committee selected the ESS program as the one to be recommended for adoption by the Union and incorporated in the institute to be conducted by the College.

The McGraw-Hill Book Co. agreed to: (1) contribute $400 toward expenses for the institute; (2) give a 25% discount on ESS supplies and equipment used by the College during the institute; (3) provide consultant services at selected times during the institute, and; (4) pay all expenses for the prospective Director of the project to attend an ESS Institute at the Educational Development Center, Newton, Massachusetts in either the spring or summer of 1971. (See appendix A, p. 10).

The prospective Director accepted this offer and attended an ESS workshop at Newton in April, 1971.

The school boards within the Union agreed that all of their elementary teachers would attend the workshop during the 1971-72 academic year. Each also agreed to adopt the ESS program during the 1972-73 academic year. (See Appendix B, p. 11.)

The project was funded for the 1971-72 academic year by a New Hampshire charitable organization, the Spaulding-Potter Trust. This budget will be discussed in a subsequent section of this work.

The institute meets each Monday evening for three hours. A general session is held for the first hour. The purpose of this session is to strengthen and modernize the subject matter backgrounds of these teachers and to bring about a constructive change in their attitudes toward science. To fulfill this function, selected topics are presented to the participants such as: the Inquiry Approach to Teaching Elementary Science, Structure and Functions of Science, Development of Scientific Thought, Science and Society, Milestones in the History of Science, Selected Topics in the Biological and Physical Sciences, Laboratory Techniques, and Special Instructional Media, i.e., use of the planetarium and closed circuit television.

The next two hours are used in learning the teaching methodology and use of the ESS units and their related supplies and equipment. This is accomplished by separating the participants into the grade levels in which they teach, K-2, 3-4, and 5-6, in three separate

classrooms with a professor assigned to each. The participants actually work through the units recommended for their individual grade levels, and then use the units in their own classrooms.

II. Objectives of the Program

The general objectives of the program are as follows:

A. To stimulate and assist New Hampshire school districts in modernizing their elementary school science programs by providing a model program for their observation, modification, and eventual adoption.

B. To update the preparation of the elementary science teachers in New Hampshire, so they may better teach their pupils and better serve as supervising teachers for student teaching programs in the colleges of New Hampshire.

The specific objectives distinctly designed for the participants in the institute are:

A. To upgrade and modernize the training of the forty-six elementary teachers in teaching science within New Hampshire's School Supervisory Union 48.

B. To bring about a constructive change in the attitudes of these teachers toward science.

C. To strengthen and modernize the participants' subject matter backgrounds in science.

D. To provide instruction to these teachers in the use of the ESS units and their related supplies and equipment.

III. Personnel Involved

The members of the Elementary Science Study Committee are listed on the cover page of this work. In addition there are several individuals who played a leading role in developing the program. Dr. Harold E. Hyde, President of Plymouth State College, obtained the funds for the program from the Spaulding-Potter Charitable Trust. Dr. John Foley, Dean of the College, presented the program to the Graduate Committee at Plymouth State College and was instrumental in getting approval for six hours of graduate credit for the teachers enrolled in the Institute. Frank R. Olcott, Assistant to the President, provided assistance in preparing the proposal for funding of the program. M. Wayne Bowie, Superintendent of the schools in Supervisory Union 48, acted in a liaison capacity between the College and the schools in his union. John G. Economapoulos, Consultant, Elementary Education, and William B. Ewert, Consultant, Science Education, both of the State of New Hampshire Department of Education supported the program. (See Appendix C, p. 12.)

Forty-six of the fifty elementary school teachers in New Hampshire Supervisory Union 48 are enrolled in the Institute. Each participant will be granted six credit hours of course work from Plymouth State College at either the undergraduate or graduate level.

IV. Budget

This project was funded by a New Hampshire charitable organization, the Spaulding-Potter Trust. The budget covers extension course salaries

for the three college professors who are teaching in the Institute, payment for the supplies and equipment which accompany the ESS units purchased from the McGraw-Hill Book Company, supplementary textbooks used by the participants and incidental supplies and equipment that are purchased locally, a total of $10,237. (See Appendix D, p. 13.)

Supervisory Union 48 has purchased ESS filmloops and textbooks in methods of teaching elementary school science at costs of $580 and $143.85 respectively. These are being used in the Institute this year and will be retained by the Union and used in the program when it is implemented in the elementary schools next year.

V. Evaluation Procedures and Data

The instructional staff decided that significant steps should be taken to improve the participants' understanding of and attitudes toward science. The Test on Understanding Science (TOUS)[1] and "Personal Opinions"[2], an attitude inventory, were administered at the first session of the institute to gather data on the participants' understandings of and attitudes toward science, respectively. These measures will be repeated in May, 1972, and compared to those achieved at the beginning of the Institute to assist in an analysis of possible changes that may have been brought about by the learning experiences provided by the program.

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[1] W.W. Cooley and L.E. Klopfer, TOUS, Test on Understanding Science, Form W, (Princeton: Educational Testing Service, 1961).

[2] M.T. Sylvestre, "Personal Opinions", an inventory which was developed as a part of Attitudes of Prospective Science Teachers Toward the Physical and Biological Sciences, (Ann Arbor: University Microfilms, 1970).

The ESS units and materials are used by the participants in the Institute. These teachers then use them in their classrooms and return to the Institute with oral and written critiques on their effectiveness in the teaching situation. This, along with all other open feedback, is used to evaluate these units and materials used in the Institute. (See Appendix E, p.15).

A representative committee consisting of participants from each of the schools in Supervisory Union 48 is preparing tentative objectives for elementary science education in the Union, and the ways which the teaching methods and materials used in the Institute may be used to achieve these goals. These will be presented in an open forum at a future session of the Institute and subsequent group meetings by grade levels to obtain feedback for review and final revision.

The participants are graded on their activities in the group sessions, the written and oral critiques on use of the units, methods and materials in their elementary school classrooms and a written examination at the end of each semester.

Like most educational endeavors, the effectiveness of this program will depend upon how successfully it reaches the pupils in these teachers' classrooms when it is implemented by Supervisory Union 48 during the 1972-73 academic year.

VI. Contributions to the Improvement of Teacher Education

This program appears to complete the journey from the development of modernized elementary science teaching units and materials under

the auspices of the National Science Foundation to the actual implementation of the program into a relatively large block of elementary schools. Its major purpose has been to serve as a model for other elementary schools that are interested in modernizing their science programs and updating their teachers' backgrounds for teaching elementary science.

Another supervisory union, Union 2, south of Plymouth State College has already requested that a similar Institute be held for its teachers during the 1972-73 academic year. The College and this Union are currently requesting funds for the program.

Other superintendents have indicated an interest in the program and the Director has been asked to address those in the areas adjoining Supervisory Union 48 at their next regional meeting.

The participants have demonstrated a great deal of self-confidence and enthusiasm over the results they have achieved with the pupils in their classrooms. Perhaps some of this vitality has been due to broadening and modernizing their understandings of science in the seminars or lectures which are held at each session of the Institute.

It appears as if these teachers will serve as a source of supervising teachers for the colleges in the state that have student teaching programs.

Consultants from the New Hampshire Department of Education have encouraged representatives from other school districts throughout the state to visit and observe the program.

Educational research suggests that the inquiry approach to teaching science is effective. This methodology has been used throughout the institute in all of the group sessions while the participants have been working through the ESS units, and when they have used them in their elementary classrooms. For many, this has been their initial experience in the use of this method. The results obtained in the classroom suggest that these teachers have adopted and will continue to use this modernized approach to teaching elementary science. When the program is implemented next year, it should serve as a model in methodology for prospective teachers who will be taking professional courses in New Hampshire colleges.

As previously mentioned, this program has involved the cooperative efforts of a college, a large unit of elementary schools, a state department of education, and a charitable organization.

During these times when there is considerable skepticism about the values of public school education and a trend toward austerity, it has been interesting to observe how this Institute has been supported by the school boards involved in the program. Their agreements to implement the program in their schools at considerable cost during the 1972-73 academic year, the appropriation made this year for books and materials used in the Institute, visits by individual board members and in organized groups suggests that college, community, and public school relations may be enhanced by similar cooperative efforts. The support by local and state communications media in presenting the program to the public has been rewarding. (See Appendix F, p. 18).

APPENDIX A

McGRAW-HILL BOOK COMPANY
HIGHTSTOWN, NEW JERSEY 08520
A DIVISION OF McGRAW HILL INC

December 23, 1970

WEBSTER DIVISION

Dr. Mark T. Sylvestre
Science Department
Plymouth State College
Plymouth, New Hampshire

Dear Dr. Sylvestre:

Thank you for your call this morning and the fine news of the adoption of ESS as the elementary science program to be supported and installed in your service area. It's great to see the kind of cooperation that you have between the public school personnel and the college staff, for this venture.

As I mentioned to you at our meeting, we are interested in supporting your teacher training efforts, and would like to offer the following:

a.) A $400 grant for equipment has been made available through the office of our product manager in St. Louis, Mr. Fred Boyd. Guy Rowe, the traveler in your area will call on you after the new year with order forms which may be utilized for all of your order, from which $400 may be deducted, and sent directly to Fred Boyd.

b.) We would like to you select a participant for our Master Teacher Workshop, for intensive training in ESS, to be held in Manchester, Missouri at the McGraw Hill center, February 8-12.

Twenty educators from throughout the country will be in attendance, along with a few original ESS developers and our own consultant staff. Participants will develop skills for working with a variety of units, and running workshops for others. Common questions of structure and evaluation will be discussed.

All expenses will be paid by the Company, including the air travel, hotel, meal and road travel expenses. An official (even more official than this!) letter with more details will come from Fred Boyd.

c.) We shall supply brochures, catalogs, newsletters and other requested literature as needed when introducing the program to the teachers: and supply all of the equipment for the program. (In a very few instances there would be a local purchase need.)

d.) I personally shall be happy to continue to work with you to assist in whatever way I can.

Success comes to those who plan for it, and I feel very confident about the future of ESS in your area.

Sincerely yours,
David W. Bole
science consultant

APPENDIX B

STATE OF NEW HAMPSHIRE
OFFICE OF
PUBLIC SCHOOL SUPERVISORY UNION NO. 48
M. WAYNE BOWIE, SUPT.
N. KENNETH SMITH, ASS'T. SUPT.
PLYMOUTH, NEW HAMPSHIRE 03264
TEL. 603-536-1254

February 1, 1971

Dr. Mark Sylvestre
Science Department
Plymouth State College
Plymouth, N.H. 03264

Dear Mark:

Please find enclosed letters from the seven school board chairman relative to the elementary science program; also the enrollment data for 1970-1971 which you requested.

If you have any further questions, do not hesitate to contact us.

Sincerely,

N. Kenneth Smith

N. Kenneth Smith
Ass't. Superintendent

NKS:llw
Enclosure

NEWELL J. PAIRE
COMMISSIONER

ROBERT L. BRUNELLE
DEPUTY COMMISSIONER

STATE OF NEW HAMPSHIRE
DEPARTMENT OF EDUCATION
STATE HOUSE ANNEX
CONCORD 03301

March 9, 1971

Dr. Mark Sylvestre
Plymouth State College
Plymouth, New Hampshire 03264

Dear Dr. Sylvestre:

We have reviewed your proposal and support it for the following reasons:

First, if the implementation of any elementary science program is to be successful, teachers must be involved in its selection. You indicate that this course of action was followed.

Second, as many elementary teachers have a limited science background and in fact may feel uncomfortable teaching science, a program of in-service education is essential for the succesful implementation of any program.

Third, cooperation between New Hampshire's various school districts and our colleges should be encouraged in an effort to improve both the pre-service and in-service training of teachers.

Fourth, several New Hampshire school districts are in the process of examining their elementary science curriculum. As they work to revise their program, it will be helpful for them to visit and evaluate a New Hampshire school union which has adopted the Elementary Science Study, ESS. It will also be to their advantage to have trained instructors available if they choose to adopt ESS.

As you implement your proposal we will be willing to assist you in working out the logistical details and in disseminating information to the other school districts in New Hampshire.

Sincerely yours,

William B. Ewert

William B. Ewert, Consultant
Science Education

John G. Economopoulos

John G. Economopoulos, Consultant
Elementary Education

WBE/JGE:ETS

APPENDIX D

UNIVERSITY OF NEW HAMPSHIRE
DURHAM, NEW HAMPSHIRE 03824

OFFICE OF THE
VICE PRESIDENT FOR RESEARCH
Thompson Hall

17 June 1971

Professor Mark T. Sylvestre
Professor of Natural Science
Plymouth State College
Plymouth, New Hampshire

Dear Professor Sylvestre:

I am pleased to inform you that your proposal "A Cooperative College-School Elementary Science Program" has been approved for funding under the Spaulding Potter-UNH grant. The budget as contained in the proposal is approved except that indirect costs (operating costs) are not allowable under the terms of the Spaulding Potter grant; therefore, the amount awarded is $10,237.

This grant is designated SPPG 71-3. An account number and budget will be established for this grant against which all expenditures will be charged. If you have any questions, please contact Mr. Miller of this Office.

It is understood that a report of the activities under this grant will be required after its completion.

Sincerely,

Robert N. Faiman, P.E.
Vice President

RNF:asd

cc: President Harold E. Hyde

CHANGE NUMBER:
Durham .....
Keene .....
Plymouth P-001

UNIVERSITY OF NEW HAMPSHIRE

Budget Change Notice

ACCOUNT TITLE Coop. College - SPPG 71-3

The following changes in the budget allotment for the account are authorized.

EXPENDITURES: Acct. No.: 33993	Per DPC only	Increase (Decrease)	Present Budget	Revised Budget
Labor	239			
Travel	399			
Supplies	499	1,127.		1,127.
Equipment	699	885.		885.
Indirect Costs	901			
Fringe Benefits	902			
Books	453	225.		225.
Reserve for salaries	099	8,000.		8,000.
Totals		10,237.		10,237.

SOURCE OF FUNDS:

Account No.					
33993	Income	199	10,237.		10,237.
	Transfers In – cost sharing	085			
	Current Budget Reserve – decr (incr)	099			
	Totals				

Reference: to establish budget for the above for the period 9/1/71 to 6/30/72.

20

Director AES-CES — Date

Budget Officer — 7/9/71 — Date

Form 22 R

APPENDIX E

Critique of Learning Experiences for
Graduate Students Enrolled in
Science Institute for Elementary School Teachers I and II

_____
(NAME)

Learning Unit Used

Grade Level

Duration of Learning Unit

How and By Whom Introduced

Objective(s) of Learning Unit

Outline of Experiences Utilized in Sequence

Specific Reaction of Students

Which experiences proved most worthwhile? Why?

Which experiences proved least worthwhile? Why?

Which experiences would you delete in future use? Why?

What supplementary exercises or materials would you suggest? Why?

What was your overall evaluation of this learning experience?

Additional comments

APPENDIX F

NEWSPAPERS

The Manchester Union Leader has a state-wide circulation of 63,000 copies. The Institute has been recognized by this medium on two occasions, July 5 and September 5, 1971 as follows:

PLANS FOR SCIENCE insitute for elementary school teachers in mid-New Hampshire are reviewed by, from left, Mrs. Phyllis Morse, teacher at Campton; Dr. Mary Bilheimer and Dr. Mark T. Sylvestre, professors of science at Plymouth State College; Miss Linda Morse, teacher at Holderness Central School; and Dr. Robert L. Jones, Plymouth State assistant biology professor. A Spaulding-Potter grant of $10,237 will allow the program to train 50 elementary teachers in a 25-mile radius of the campus in modern principles of science instruction.

(Photo by Plymouth State College)

July 5, 1971

MANCHESTER (N. H.) UNION LEADER—Saturday, September 25, 1971

DR. ROBERT L. JONES, assistant professor of biology at Plymouth State College, discusses the names of bones of the human body with Plymouth area school teachers, from left, Mrs. Judy Landry, second grade teacher at Holderness; Marion Fysch, sixth grade teacher at Plymouth, and Sonja Farrington, elementary teacher at Wentworth, who are among teachers in Supervisory Union 48 attending a unique institute at the college, designed to provide them with modern principles of science instruction. (Photo by PSC)

The Circulation of the Plymouth Record includes each of the towns included in the program. It has recognized the program twice in the following:

this week.

(20-20)

Supervisory Union 48 Teachers to be Up-Graded in Modern Principles of Science Instruction

SCIENCE COURSE — Plans for a special Plymouth State College run institute to up-grade area elementary school teachers in modern principles of science instruction are reviewed by (l-r, seated row) Dr. Robert L. Jones, Plymouth State science department; Marion Fysh, Plymouth elementary school; Miss Linda Morse, a 1969 graduate of PSC and teacher at Holderness Central School; Dr. Mark Sylvestre, college science department and project chairman; Mrs. Phyllis Morse, Campton teacher and a 1911 graduate of PSC; Nancy Sanborn, Plymouth, Dr. Mary Bilheimer, college science department; and Harriet Pray, also of Plymouth; (standing left to right) Frank R. Olcott, assistant to the president at the college; Wayne Bowie, superintendent of schools; college President Harold E. Hyde; Dr. George Salmons, science department chairman; and Kenneth Smith, assistant superintendent of schools. A Spaulding Potter special project grant of $10,237 will provide the opportunity for some 50 elementary school teachers in a 25-mile radius of the campus to participate in the 30-week institute which begins in the Fall.

A total of $13,041 in Spaulding-Potter special project grants this week were awarded to Plymouth State College for four separate programs aimed at providing set long-term benefits to community and state-wide publics.

Lion's share of the funds, a $10,-237 award, was granted for a uniquely-designed program aimed at up-grading some 50 elementary school teachers in New Hampshire's Supervisory Union 48 in modern principles of science instruction.

Teachers involved work in a 25-mile radius of the college's campus in the school districts of Campton, Holderness, Thornton, Plymouth, Rumney, Waterville Valley, and Wentworth.

The institute, to be conducted by Plymouth State science professors Dr. Mark T. Sylvestre, project chairman, Dr. Mary L. Bilheimer, and Dr. Robert L. Jones, will span a 30 week period beginning in the fall.

A grant of $1,212 was awarded the Plymouth State business department to make a study of educational programs that would define a closer relationship between course offerings and the present day requirements of New Hampshire's business firms.

According to R.L. Church, instructor of business administration, the survey would insure that business administration graduates were properly prepared for current and future professional positions in the state.

A research project designed at gathering historical and cultural information to supplement existing New Hampshire promotional literature was granted $1,080.

Noting that the emphasis of present tourist materials focuses largely on the state's recreational assets, Dr. Walter Tatara, professor of English who will compile the materials, will gather information and photographs on a number of Granite State historical landmarks.

The articles and photos, he said, could be used in a wide variety of in-state publications and general interest magazines to enhance New Hampshire's image as not only a vacation paradise but an area rich in "Americana."

Also awarded was a $512 grant for a community service art project to be centered at nearby Laconia where the "Save-the-Mills" Society is establishing programs to remodel two old mills in the heart of the town's business district.

Art instructor James Fortune, cooperating with the society's idea of developing a display and cultural center in the building, will conduct a series of three-hour painting lessons once a week for six weeks this summer.

His art courses will coincide with similar adult instructional classes in such areas as pottery and weaving. Overall, the society's plans for the center, once the pilot project is completed, would continue on its own.

SCIENCE INSTRUCTION — Dr. Robert L. Jones, assistant professor of biology at Plymouth State College, discusses the names of bones of the human body with Plymouth area school teachers (left to right) Mrs. Judy Landry, second grade teacher at Holderness; Marion Fysch, sixth grade teacher at Plymouth; and Sonja Farrington, elementary teacher at Wentworth. The ladies are among teachers in Supervisory Union 48 who are attending an unique institute at the college, designed to provide them with modern principles of science instruction. Professor Jones is joined in the teacher-oriented instruction program by Professor Mary Bilheimer and Professor Mark Sylvestre, who is the project chairman. The program, which began recently, will span a 30-week period. Funding for the community project was provided by a Spaulding-Potter grant. (PSC Photo)

September 23, 1971

BULLETINS

Forty-two hundred alumni of Plymouth State College were made aware of the program through the following release in the alumni bulletin, Conning Tower Gleanings.

Joint Project Between Community and College

Plans for a special Plymouth State College institute to up-grade elementary school teachers in modern principles of science instruction are reviewed by (left to right, first row) Dr. Robert L. Jones, PSC science department; Marion Fysh, Plymouth elementary school; Linda Morse, a 1969 PSC graduate and teacher at Holderness central school; Dr. Mark T. Sylvestre, college science department and project chairman; Mrs. Phyllis Morse, Campton elementary school teacher and a 1941 PSC graduate; Nancy Sanborn, Plymouth elementary school; Dr. Mary Bilheimer, college science department, and Harriet Pray, also of Plymouth. (Standing, left to right) Frank R. Olcott, assistant to the president at PSC; Wayne Bowie, superintendent of schools, Supervisory Union 48; PSC President Harold E. Hyde; Dean of the College John C. Foley; Dr. George Salmons, college science department chairman; and Kenneth Smith, assistant superintendent of schools. A $10,237 Spaulding Potter special projects grant will enable the college to run a 30-week institute for teachers in Supervisory Union 48, which encompasses school districts in a 25-mile radius of the campus.

SPEAKING ENGAGEMENTS AND DISCUSSIONS

Two of the professors who are teaching in the Institute addressed an interested group of supervisory personnel and teachers of Supervisory Union 2 in August of 1971.

On the evening of November 22, 1971, The Director of the Institute discussed the program with members of the school boards from the districts incorporated in Supervisory Union 48. This discussion was held as a part of a scheduled visitors night. Publicity on this visit was being released at the time this document was being completed.

Professors teaching in the Institute are tentatively scheduled to speak to the Plymouth Rotary and Lions Clubs. A discussion of the program and how it benefits the community is tentatively scheduled to take place among administrative personnel of Supervisory Union 48, a representative from one of the school boards and the Director of the Institute over the local radio station, WPNH, in the near future.